REMARKS

This is in response to the non-final Official Action currently outstanding with regard to the above-identified application.

Claims 1-6 were pending in this application at the time of the issuance of the currently outstanding Official Action. By the foregoing Amendment, Claims 1-6 have been amended to more clearly and distinctly state the subject matter that Applicants regard as their invention. No claims have been cancelled, added or withdrawn. Accordingly, upon the entry to the foregoing Amendment, Claims 1-6 as hereinabove amended will constitute the claims pending in this application.

The claims as they will stand upon the entry of the foregoing amendment are reproduced above as required by the Rules.

In the currently outstanding Official Action, the Examiner has:

1. Failed to acknowledged Applicants' claim for foreign priority under 35 USC 119(a)-(d) or (f), and confirm the receipt of the required copies of the priority documents for this application by the United States Patent and Trademark Office – **Appropriate acknowledgment and confirmation of these matters in response to this communication is respectfully requested for the sake of good order and clarity of the record**;

2. Provided Applicants with a copy of the PTO Form 1449 that accompanied their Information Disclosure Statement of 11 March 2004, duly signed, dated and initialed by the Examiner in confirmation of his consideration of the art listed therein;

3. Failed to confirm that the drawings filed as on 11 March 2004 are acceptable – **Appropriate confirmation of the acceptability of the drawings in response to this communication is respectfully requested**;

4. Provided Applicants with a Notice of References Cited (Form PTO-892);

5. Rejected Claims 1-6 under 35 USC 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter that Applicants regard as the invention – **By the foregoing Amendment, Applicants have extensively amended the claims of this application in view of the Examiner's detailed comments concerning the instances of lack of clarity he noticed herein. It is believed that the foregoing Amendment overcomes all of the Examiner's outstanding rejections under 35 USC 112, second paragraph, with the exception of the Examiner's objection to Applicants use of the phrase "at least one plurality of elevator pins".**

Applicants respectfully submit, however, that the latter wording is not unclear as used in the present claims because there are clearly more than one plurality of elevator pins associated with the transport stages (i.e., for example, the pluralities of elevator pins that line the sides of the gap between the transport means parallel to the workpiece travel direction and the pluralities of elevator pins that extend across he workpiece travel direction (see particularly, Claim 2). Applicants respectfully submit in the context of this application it is appropriate to refer to those "pluralities" either individually or in groups. Accordingly, it is respectfully submitted that the reference to "at least one plurality of elevator pins" is clear to one of ordinary skill in the art as that phraseology is utilized in the present claims. A decision so holding in response to this communication is respectfully requested.

6. Rejected Claims 1-6 under 35 USC 103(a) as being unpatentable over the AKAO reference (JP 11-34779) in view of the OSTENDARP reference (US Patent 6,220,056 B1).

With respect to items 1-5, Applicants respectfully submit that no further comment in these Remarks is required.

With respect to item 6, Applicants respectfully ***traverse*** the Examiner's rejection of Claims 1-6 under 35 USC 103(a) on the following grounds.

The Examiner appears to be of the belief that the AKAO reference teaches the presently claimed invention with the exception of employing fluidic expulsion to float the workpiece, and further that the OSTENDARP references teaches the floating of a workpiece by fluidic expulsion in such a manner that when combined with the AKAO reference results in the present invention. Hence, the Examiner has taken the position that the present invention would have been obvious to one skilled in the art at the time that it was made since all of its elements are disclosed within the four corners of the art in the same or an analogous field to that of the present invention.

Applicants respectfully disagree. Specifically, Applicants note that there is a significant difference between the elevator pins of the presently claimed invention and those disclosed by the AKAO reference (which are characterized therein as "a clamping mechanism" 25). Accordingly, it is to be understood that the elevator pins (i.e., the "clamping mechanism") of the AKAO reference mechanically and fixedly force the workpiece against the surface of one or the other of the transport members therein shown and retain that mechanical engagement throughout the rotation operation. The AKAO reference does not contemplate that the workpiece will be held afloat between the transport members either prior to, during or after the rotation of the transport members so as to invert them, nor does the AKAO reference anywhere contemplate that a workpiece held afloat between first transport members may be floatingly transferred to a location between adjacent downstream transport members as also contemplated by the presently claimed invention.

On the other hand, the elevator pins of the present invention retractably contact with or mate with an opposing transport stage so as to create an rotatable enclosure in association with the opposing transport members that acts to retain a workpiece therein which is caused to float by fluidic action. Further, the elevator pins of the present invention may be wholly or partially retracted after the rotation of the associated transport member pair such that, for example, the workpiece can be lowered onto the surface of the transport member opposite to that originally disposed below it, or allowed to glide on a fluidic cushion from between one transport member pair to between an adjacent transport member pair while being restrained from moving in any other direction by a "plurality" of the elevator pins of the source and the destination pair of transport members.

Still further, Applicants respectfully note that the AKAO reference nowhere teaches, discloses or suggests that the elevator pins disclosed therein are to be equipped with either an anti-vibration member or a damping member as set forth in claim 3 of the present application.

In sum, therefore, it will be understood that in the AKAO reference the workpiece to be flipped is mechanically forced against one of the surfaces of the transfer stages between which it is located prior to being flipped. Also, after the workpiece is flipped, the workpiece is mechanically lowered to the surface of the transport stage opposite to the one against which it was held during flipping by the retraction of the pins bearing against it. This is contrary to the present invention wherein the elevator pins are adapted to retain the **peripheries** of a workpiece to be flipped so as to **maintain in conjunction with a fluidic flow the floating position of the substrate between the transport stages during the flipping operation**, and to be selectively retracted after flipping of the substrate either to allow the substrate to come to rest on what was originally to top transport stage or to allow it to move to the next stage by gravity in a floating condition.

Consequently, even if the OSTEDARP reference discloses floating substrates between parallel plates by expulsion as the Examiner suggests, nothing in that reference discloses, teaches or suggests that a workpiece can (or should) be flipped in a floating position between plates, discharged from between the plates in a floating condition, or held against one of the plates by suction during flipping.

Hence, while the combination of references cited by the Examiner may disclose mechanically immobilizing a substrate against an adjacent surface of a transport stage for flipping and the floating of the substrate between the transport stages, that combination clearly fails to teach, disclose or suggest elevator pins engaging the periphery of a gap between transport members so as to maintain a workpiece within the enclosure so defined in conjunction with a fluidic flow utilized to maintain a floating position of the workpiece between opposing transfer stages during flipping.

Similarly, the art relied upon by the Examiner does not teach, disclose or suggest releasing the periphery of the enclosure so formed wholly so as to allow the workpiece to come to rest on the original upper transport stage, or partially for transfer from a floating position with respect to one transport member pair to a floating condition with respect to an adjacent transport member by partial flipping and selective elevator pin withdrawal as herein claimed.

In other words, the AKAO reference depends upon mechanical means bearing against a side surface of a workpiece to fix the position of the workpiece between transport stages during flipping, and OSTENDARP teaches only floating a substrate between fixed transport stages. Nothing in either reference teaches, discloses or suggests either maintaining a workpiece in its floating position during flipping using selectively withdrawable, peripheral bearing elevator pins in conjunction the opposing transport members or the use of suction for maintaining the workpiece against a surface of a transport stage during flipping.

Accordingly, Applicants respectfully submit that neither of the cited references, whether taken alone or in combination with one another, is sufficient to teach, disclose or suggest the present invention to one skilled in the art. In fact, all of the elements of the present invention are not taught within the four corners of the cited art as is required to support a *pima facie* holding of obviousness under 35 USC 103(a).

Consequently, in view of the foregoing Amendment and Remarks, Applicants respectfully submit that the claims of this application as hereinabove amended are in condition for allowance. Therefore, entry of the foregoing Amendment, reconsideration, and allowance of the claims of this application as set forth hereinabove in response to this communication are respectfully requested.

Finally, Applicants believe that additional fees are not required for consideration of the foregoing Amendment After Final Rejection Under 37 CFR 1.116. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge Deposit Account No. **04-1105** therefor.

Respectfully submitted,

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